# Networks, advocacy and evidence in public health policymaking

**Networks, Advocacy and Evidence in Public Health Policymaking: Insights from case studies of European Union smoke-free and English health inequalities policy debates**

## Background

The arguments for supporting the use of evidence in policymaking are, of course, well-rehearsed in this journal and they have been particularly well made in the context of public health policy (Smith 2013). For those seeking to promote evidence as a basis for rational decision-making in policy (e.g. Haynes et al. 2012, Henderson 2012), it is easy to conceive of 'politics' as little more than a 'barrier' to rational decision-making or, in Pawson's terms, 'the four-hundred pound brute' that quashes the 'six-stone weakling' that is evidence (Pawson 2006: pviii). Yet, as Mulgan (a former advisor to the then UK Prime Minister, Tony Blair) has pointed out in an early contribution to this journal, in democratically elected countries, 'the people, and the politicians who represent them, have every right to ignore evidence' (Mulgan 2005: p224). And, indeed, assessments of public health policies often continue to conclude that policies areas are not evidence-based, even for issues on which there appears to be a strong research consensus (Smith, 2013).

From the perspective of political science and policy studies, the finding that public health policies are generally not evidence-based is wholly unsurprising since key theories of policy change tend to focus on the normative, democratic and interest-driven aspects of politics and policymaking (Smith and Katikireddi 2012). One of the most popular family of theoretical approaches for understanding policymaking processes emphasises the need to understand the multiple actors involved in 'policy networks' and their varying interactions (e.g. Marsh and Rhodes 1992, Marsh and Smith 2000). Focusing on policy networks does not require abandoning efforts to analyse and support the use of evidence in policymaking but it does broaden our analytical lens, drawing attention to the multiple ways in which knowledge, evidence and ideas interact with each other as they are circulated between a wide variety of actors (e.g. publishers, journalists, advocates, NGOs and funders) within research, advocacy and policy settings.

The policy networks literature is diverse (see Borzel, 1998; and Warden, 1992) but, within this, there is a clear and widely cited sub-set of policy networks literature that argues that tight policy networks tend to form around shared values. From this perspective, while evidence and research-informed ideas have opportunities to enter policy networks, they are unlikely to bring about any radical shifts in a network's position or policy preferences since members are more likely to draw in evidence and ideas that reinforce their core values and beliefs. Haas' (1992) notion of 'epistemic communities',

which describes a particularly tightly knit form of policy network, offers one useful example. Haas' argues that, although the 'experts' involved in epistemic communities may come from a variety of professional backgrounds, four key features unite them:

> '(1) a shared set of normative and principled beliefs, which provide a value-based rationale for the social action of community members; (2) shared causal beliefs, which are derived from their analysis of practices leading or contributing to a central set of problems in their domain and which then serve as the basis for elucidating the multiple linkages between possible policy actions and desired outcomes; (3) shared notions of validity - that is, intersubjective, internally defined criteria for weighing and validating knowledge in the domain of their expertise; and (4) a common policy enterprise - that is, a set of common practices associated with a set of problems to which their professional competence is directed, presumably out of the conviction that human welfare will be enhanced as a consequence.' (Haas 1992: p.3)

Noting that members of tight policy networks (such as epistemic communities) are believed to share a similar 'world view', Marsh and Smith (2000: p.6) suggest that shared values effective operate as 'a structural constraint on the action of network members', serving to define 'the boundaries of acceptable policy'. Likewise, Sabatier and Jenkins-Smith's (1993) 'Advocacy Coalition Framework' (ACF) proposes the existence of tight policy networks that coalesce around shared 'core values' (or belief systems). The ACF suggests diverse groups of actors contribute to these networks (e.g. journalists, academics and think tanks as well as policymakers and interest groups) but that such networks remain relatively stable because they form around core values and beliefs, which bind actors together in competing coalitions seeking to influence policy decisions.

It is perhaps because of the assumption that values and political dynamics are key to understanding the ability of policy networks to influence policy that there are few empirical studies of the role that research evidence plays within epistemic communities or other value-basedpolicy networks. Employing case studies of two public health policy debates, developing smoke-free policies in the European Union (EU) and tackling health inequalities in England (two value-laden policy areas – Smith, 2013), this paper seeks to begin addressing this research gap. By analysing actor constellations and interactions in these two key public health policy areas, the paper explores how relationships between researchers, advocates and policymakers can shape the evolution and fate of research-informed policy proposals. Reflecting on the findings, we argue that popular 'policy networks' theories, including Haas' (1992) concept of 'epistemic communities' and Sabatier and

Jenkins-Smith's (1993a) 'Advocacy Coalition Framework', may overstate the role of core values in driving the decisions and activities of members of policy networks. Instead, we suggest that, at least for our two public health case studies, strategic public health advocacy, including explicit (sometimes contested) policy trade-offs, are key to understanding the contrasting outcomes of our two case studies.

## Methods

In this section, we first provide some context to each of the two case studies. We then explain the data sources and analysis employed in each. Both draw on an analysis of documentary data (primarily, in both cases, a consultation exercise) and interviews with relevant stakeholders.

### *Case Study 1: The Development of an EU Smoke free Recommendation*

The first case study focuses on EU tobacco control policy, i.e. an area of public health that has a considerable history of well-developed international advocacy involving researchers, advocates and others, working in opposition to tobacco industry interests (evidenced, for example, by the World Health Organization 2003 Framework Convention on Tobacco Control - FCTC). The study analysed stakeholder engagement in the context of the EU Council Recommendation on smoke-free environments, around which a clear public health policy network arose. This policy is a non-binding document recommending European member states to adopt and implement comprehensive smoke-free policies without exemption to effectively protect their citizens from the health harms caused by exposure to second-hand smoke (Council of the European Union 2009). The recommendation was adopted by the Council of the European Union in November 2009 after three years of negotiations, including an official policy consultation, two years after the adoption of the FCTC guidelines for implementation of Article 8, which outline comprehensive smoke-free policies without exemptions as the "gold standard" (Conference of the Parties (CoP) 2007) and only five years after the first country in the world had introduced comprehensive smoke-free legislation in 2004 (Republic of Ireland 2002). The EU policy largely reflected the position of advocates and researchers who had emphasised the need for EU smoke-free policy to be comprehensive (over a requirement for it to be binding). The policy was adopted relatively quickly in EU terms, despite the difficulty of working across 27 member states with widely varying approaches to smoke-free policy. It is crucial to acknowledge that the final policy was non-binding, i.e. the document fell short of the call of the FCTC guidelines for article 8 for legislation to be enforceable and simple to implement, but the majority of

network members perceived a binding requirement as impossible to accomplish due to the EU's lack of legal competence on health matters. In this context, this case study can be understood as a policy 'success' from a public health perspective, with demonstrable examples of evidence-use by policy network members.

***Case Study 2: A Government Commissioned Review on Tackling Health Inequalities in England (the Marmot Review)***

The second case study focuses on analysing efforts to influence a UK Government commissioned *Strategic Review of Health Inequalities in England post 2010*, led by the health inequalities researcher Professor Sir Michael Marmot (commonly known as the Marmot Review), which was published in February 2010 (Marmot 2010). This review, which incorporated an official consultation exercise in the first phase (in 2009), was undertaken towards the end of a period in which (centre-left) Labour governments (in power 1997-2010) had developed a series of policy initiatives with the explicit intention of reducing health inequalities (e.g. Department of Health 1999, 2002, 2005), which appeared not to have succeeded in achieving the intended reduction (Bauld et al. 2008). In this context, the Marmot Review might be understood as a last, pre-election attempt by the Labour government (and interested stakeholders) to achieve some consensus around policy proposals for reducing health inequalities. In broad terms, this case study can be understood as a less successful example of a policy network using evidence to influence policy since, as we discuss below, not only is it difficult to attribute any substantive subsequent policies to this review but there is an absence of an obvious policy network around specific policy proposals. Set against the first case study, it is important to note that the overarching ambition of this network was rather greater, being to achieve a wide range of policy changes, cutting across multiple government departments, that would intersect to reduce health inequalities (as opposed to achieving a single, specific policy recommendation, developed primarily by one European Commission Directorate General). This is a distinction we return to in the results and discussion since we suggest that it is an ambition that speaks to a reluctance by those working to reduce health inequalities to engage in the kind of strategic policy trade-offs that tobacco control network members appear to have accepted as a necessary part of achieving policy change.

***Analysing the Consultation Submissions***

For both case studies, publicly available policy documents were reviewed, with a particular focus on submissions to the European Commission consultation on smoke-free policy and the English consultation for the Marmot Review. For Case Study 1, we analysed 169 organisational submissions, excluding 136 submissions from individual respondents. While, for Case Study 2, we analysed 89 submissions, excluding 11 others on the basis that they were either not 'tailored' responses (e.g. the submission of pre-existing reports without cover letters or responses which did not address any of the consultation questions), or because the response was from an individual or a non-identifiable respondent (there were a small number of submissions for which identifying details had been removed for data protection reasons). Following an events-based approach to network boundary specification (Laumann, 1992), each organisation which submitted a response to the public consultation was registered as a node and assigned attributes based on our analysis of the consultation submissions and assignment of the characteristics of the organisation. We then sought to explore relationships between network members (the 'network' being those organisations that submitted a tailored policy response). For Case Study 1, two submitting organisations were recorded to have some kind of relationship if: (i) organisation A was mentioned as a collaborating partner on the website or consultation submission of organisation B (such a link was termed a public relationship), or (ii) organisation A cited three or more references in its submission which were also cited in the submission of organisation B (termed shared discourse), or (iii) plagiarism detection software showed that the submission of organisation A was at least 40% identical to that of organisation B (termed active relationship) (for more detail on the methodology, see Weishaar et al. 2015). Due to limited overlap in the wording of the consultation submissions, this approach could not be employed for Case Study 2. Instead, a two mode network (Latapy, 2008) was created based on the attributes, i.e. actors were defined as being linked if their consultation submissions shared one or more topic foci. In both cases, the data were analysed using UCINet Version 6 (Borgatti et al. 2002) in order to systematically and quantitatively analyse actor constellations and interactions.

***Stakeholder interviews***

Qualitative data were gathered through semi-structured, narrative interviews with policymakers, researchers, advocacy groups and other individuals who were involved in policy discussions relating to each case study. For Case Study 1, interviewees were purposively sampled from a list of 175 key individuals based on their organisation's prominence in the policy process, the organisational type and the organisation's position in the policy debates with the aim of achieving a diverse sample. This resulted in a final sample of 35 interviewees. For Case Study 2, the identification of potential interviewees was informed by earlier research that had been undertaken by KS examining the use of

health inequalities research in policy debates. The final sample of 38 individuals are part of a larger set of 69 interviews involving researchers working on health inequalities in the UK undertaken in 2011-2012; these 38 were selected for analysis for this paper on the basis that they had focused on trying to influence policy debates about health inequalities in England in the run up to the Marmot Review, with several having been directly involved in the Review (and others having tried unsuccessfully to engage). A breakdown of interviewees by professional group is provided in Table 1.

**<<Insert Table 1 here>>**

Both case studies employed semi-structured interviews and used topic guides that were informed by the documentary analysis. The interviews for Case Study 1 were also informed by informal pilot conversations and the interviews for Case Study 2 were informed by the earlier (already completed) research exploring the relationship between health inequalities research and policy from 1997-2008 (Smith, 2013).

Interviews for Case Study 1 took place between March and July 2011 (i.e. within two years after the Recommendation) and lasted on average 60 minutes; interviews for Case Study 2 took place between January 2011 and December 2012 (i.e. within two years after the publication of the Marmot Review) and also lasted an average of an hour. All interviews with the exception of three in Case Study 1 and five in Case Study 2 (where interviewees had requested notes be used instead) were recorded and transcribed verbatim. Aided by QSR NVivo (QSR International 2007) a hermeneutic analytical procedure was followed for both case studies, entailing an iterative process of identifying themes, coding and thematically analysing the data (Gaskell 2000). Ethical approval for the study was obtained from the Centre for Population Health Sciences and the School of Social & Political Science at the University of Edinburgh.

**Findings**

The results are divided into sub-sections, with the first focusing on analysing actor constellations and dynamics, paying particular attention to the role of different types of actors and to factors which were identified by interviewees, or which emerged in our analysis, as important to understanding the perceived success (or not) of the policy networks we identified. In sum, what we see here is that the policy subsystem, incorporating two policy networks, was clearly delineated in Case Study 1 while, in Case Study 2, actors appear to be so widely dispersed that it is questionable whether the term 'policy

network' is even appropriate. The subsequent sub-sections each explore key features of the contrasting policy networks and their intersection with research and advocacy. Our analysis here highlights the crucial intersection between research, advocacy and policy in Case Study 1 and the substantial lack of such interaction in Case Study 2. Finally, we consider the role that contextual (many, though not all, political) factors played in each case study. All three sub-sections reflect on the role of research evidence and researchers and this aspect of the analysis is developed further in the Discussion section.

*Network actors and interactions*

The data indicate that, for both case studies, a variety of types of organisational actors engaged in policy discussions and sought to influence debates. A summary of actor types responded to the consultation exercises we examined is provided in Table 2. In relative terms (given the larger size and multi-country scale of the EU consultation), we can see a greater spread across different actor types in Case Study 1 (smoke free policy in the EU), compared to Case Study 2 (health inequalities in England), the latter being dominated by submissions from the voluntary and public sectors.

**<<Insert Table 2 here>>**

While, overall, the types of organisations that submitted to the two consultation processes were similar, applying SNA revealed markedly different network structures across the case studies. In Case Study 1, there was a clear division between the two main subgroups of the network when applying the Girvan Newman algorithm (indeed, from the perspective of ACF, these groups would probably be understood as representing distinct policy networks within the larger policy subsystem of tobacco). One subgroup was made up of health-related organisations in the broadest sense (i.e. voluntary sector organisations focused on health, public authorities with a remit in health, organisations representing health care professionals, and pharmaceutical companies). The other subgroup exclusively consisted of organisations with some connection to the tobacco industry. Only one link existed between the two, notably a public relationship between an employers' association and a health-related organisation on the one hand and an organisation with tobacco industry affiliation on the other hand (figure 1). In Case Study 2, on the other hand, the composition of the policy network was mixed and the delineation of any subgroups was unclear, with multiple types of actors spread across the policy network and no subgroup clearly focusing on a particular cause (figure 2a) or solution (figure 2b).

This difference was reinforced when comparing the interview data with the policy submissions for each case study; in case study 1, these two data sources reinforced each other, with interviewees providing very similar accounts, in which different types of actors were appreciated for bringing differing expertise to the policy process. For example, representatives of the health professions were largely perceived as experts in public health practice; scientists and academics as bringing expertise in scientific research methods and evaluation as well as knowledge of the latest public health research; advocates as experts on how to advance specific political viewpoints; commercial sector representatives as providers of financial resources and technical information; and governmental agencies as experts on policy development, able to assess the likelihood of success for a specific policy initiative and provide guidance on the legislative bodies' agenda. One of the public health advocates involved in the network captured a broader trend in the data by describing a sense that those advocating for EU smoke-free policies felt "a strong sense of [being] one big team". Within this network subgroup, actors based in different sectors discussed actively collaborating with each other and trust generally appeared high, with some actors reporting that they had previously known each other and worked together on other policy initiatives. The links between actors were mirrored in the network analysis which provided evidence of dense links among a core group of actors (some had even established formal organisational connections through funding or membership), while looser links were evident between actors in the periphery of the network. Interviewees reported that as discussions on EU smoke-free policy emerged, actors had activated these links and sought contact in order to discuss their positions, develop a joint advocacy strategy and ensure consistent external communication. Such efforts resulted in a considerable degree of active collaboration, the exchange of texts and surprisingly little disagreement regarding the messages that were communicated to policymakers (as discussed further below).

In contrast, in case study 2, interviewees' descriptions of the policy network around the Marmot Review (or health inequalities debates more broadly, since the two often overlapped in interviewees' accounts) frequently commented on the lack of a coherent coalition. This was particularly true for actors who were also actively engaged in tobacco control who often unfavourably compared the two policy areas in terms of not being able to identify either a supportive advocacy coalition (policy network) or a specific policy campaign withing health inequalities:

> Public health NGO staff member: *"I'm not aware of a particular coalition that looks at [health inequalities]. There's the Marmot review and more recent report as well that came out [so] it's clearly on public health's agenda as an issue, but it's not something which for example there is a campaign on similar to standard packs."*

Moreover, many of the academic interviewees (most of whom contributed to the Marmot Review in some way) struggled to identify any non-academic organisations actively working to influence health inequalities policy debates, even though the consultation submissions indicated that plenty of organisations had at least enough of an interest to invest the time in developing and submitting a consultation response (see Table 2). The mismatch between the two data sources, combined with the lack of identifiable network structure and the interviewees' unawareness of like-minded political allies, suggests that, despite the longstanding nature of health inequalities debates in England, no clear policy network had emerged by the time the Marmot Review was being undertaken. Rather, the interviews from case study 2 evoke a sense of highly fragmented community of actors, as the following quotation indicates:

> Health professionals group: *"[Health inequalities is] atomised really, I would say. There are organisations like the Institute of Health, Michael Marmot's; I've forgotten what you call it, just recently set up, but also the one, Richard… Wilkinson, The Equality Trust, yes, and many others but they tend to work in particular fields so you have people who are working in the housing area, a lot of people [in] education, a lot of people are working through disabilities, children is another big thing, elderly people. They're more topic based if you like or issue based than just health inequalities."*

In this context, a small number of interviewees (most, though not all, of whom contributed to the review) suggested that the Marmot Review played an important role in coalescing a network, albeit for a relatively short period:

> Academic (interviewee): *'I suppose [the Marmot Review] drew together the community in a way, the inequalities community in a way, gave a focus over quite a long period. I mean as a marketing exercise, I don't mean that negatively, it was a very good thing. […] But I feel that that's been dissipated now…'*

However, some of the academic interviewees who had not been as closely involved in the review were more critical, variously suggesting that the exercise served as a means of promoting Marmot as an individual (rather than coalescing a policy network), with several pointing out that they felt the same basic report had been reproduced at global, European and UK levels. One academic even said she felt her own work had been used without due acknowledgement, citing similarities between earlier work she had published and the final Marmot Review report. Here, the interview data

highlighted low levels of trust and, in a few cases, respect between some of those working to use health inequalities research to influence policy debates.

Given the personalised nature of these criticisms, and the fact the speakers are anonymised while the subject of the critique is not, we have opted not to include these extracts in the final, published version of this article (though relevant extracts were provided to reviewers). In sum, these aspects of the data suggest that, while many academics involved in the Marmot review reported the process had provided a crucial coalescing moment for the health inequalities field and expressed appreciation for Marmot's role in this, some of those who were not involved challenged the value and originality of the resulting report and, in several cases, the commitment of Marmot himself to achieving the necessary policy changes.

All of this suggests that the kind of cohesive advocacy coalition/policy network evidence in Case Study 1 was lacking for Case Study 2, with interviewees consistently describing the area as highly fragmented/atomised, with few links across third sector, private sector and research communities, and a sense of distrust between key academics.

*Values and network 'binding'*

As discussed in the introduction to this paper, much of the theoretical literature concerning policy networks places a strong emphasis on the role of values in binding network members (e.g. Haas 1992, Sabatier and Jenkins-Smith 1993b) and, in a very basic sense, both case studies displayed evidence of shared values. Hence, what seemed to have prompted involvement in the policy network was an interest in promoting public health or a specific health issue (for the public health subgroup in case study 1, tobacco control or a related health concern such as cancer, and for case study 2, reducing health inequalities) as well as a willingness/desire to engage in policy discussions. In several cases, respondents referred to shared ideological goals that they felt helped coalesce some network members, for example their desire to "*save citizens' lives"* (public health advocate, case study 1) or *"change society for the better"* (European public affairs expert, case study 1) or contribute to *"social justice"* (academic, case study 2). In both cases, interviewees also described seeking contact with actors that voiced similar political views and interests in the issue. However, beyond this, the role of values seemed rather more ambiguous than the theoretical literature led us to anticipate. In case study 1, the majority of interviewees suggested that strategic ambitions and the desire to achieve a specific policy outcome were more relevant in guiding decisions about what to prioritise politically and who to collaborate with, rather than deep-seated values. For example,

public health organisations whose core aim was to advance public health were willing to work with pharmaceutical companies (who engaged in the policy debates because they were interested in advancing their business interests and building their political reputation) because they saw a strategic advantage in collaborating with a policy actor who was able to financially invest in the issue.

In case study 2, actors' interest in reducing inequalities almost invariably seemed to equate with political values that were left-of-centre, though it was clear that there were marked variations within this which culminated in some actors deriding the scientific analyses of others on the basis of their political values (e.g. *"X is a Marxist [and…] often his politics cloud his scientific analysis"*). Likewise, in epistemological terms, there appeared to be a broad consensus that quantitative, statistical research was often particularly useful and, while there were mixed views on the value of qualitative enquiry, this did not appear to be a key factor in explaining network divisions. However, there were multiple examples of interviewees who positioned themselves as left-of-centre and who employed (or expressed an appreciation for) quantitative research who were nonetheless critical of the work of other, left-of-centre quantitative researchers. For example:

> Academic: *"I think [Blank – fellow statistical researcher] cuts corners and he […] chooses his statistics in a way that are going to make a story […] but, on the other hand, I wouldn't say he was statistically poor. […] The problems I have is where people sort of fiddle - oh I'm sorry, I'm sure [Blank – another statistical researcher] is lovely but I was reeling with that analysis. It was so bad, I can't describe! And it was […] getting all this [media and policy] attention…"*

Overall, three types of critiques are common in the case study 2 data: (i) claims that some researchers are selective in the data they present; (ii) claims that some research is statistically poor quality; and (iii) claims that some researchers go beyond the available data in making particular policy recommendations. These disagreements are important in understanding the lack of a cohesive policy network but it seems hard to attribute the divisions to core values or beliefs since interviewees' critiques were often prefaced with, or followed up by, an expression of broad ideological sympathy.

*Developing shared strategic goals*

In case study 1, participants suggested that it had been relatively easy to achieve a consensus within the public health policy subgroup that comprehensive smoke-free policy, without exemptions, would be the only effective tobacco control policy. However, there were initially disagreements regarding the nature of the policy that should be advocated for: ideally, from a health perspective, any policy

would need to be mandatory but advocates were aware that, due to the limited competence of the EU in public health, they were unlikely to achieve a binding regulation requiring comprehensive smoke free policies. As the following quotation illustrates, this led to some disagreement, which was resolved through a vote and a subsequent discussion:

> Public Health Advocate, case study 1: *"There was a split […] of the NGOs in the sense that ENSP [a pan-European Brussels-based organisation advocating for tobacco control] discussed that at their general assembly, and there was a final vote and two thirds wanted to have a binding directive, and one third didn't want to have a binding directive […] but a recommendation. So we had two opinions in relation to that."*

In the end, a decision was taken to argue for a Council Recommendation, i.e. for a compromise in terms of policy format in order to achieve the optimum in terms of policy content. Interviewees accounts suggest high levels of trust within the network, and the consensus around the policy content, enabled the coalition to overcome this strategic disagreement.

In contrast, in case study 2, network actors were often unsure as to whether the fundamental strategic framing of health inequalities policy debates should be around health or wider socio-economic inequalities (for a more detailed discussion of this debate, see Lynch, 2017):

> Academic: *"Social justice issue, and which again I suppose [are] at the heart of Marmot really, it isn't just a health issue, it goes to the heart what society's about […] and to turn the whole thing to a health debate is possibly missing a trick."*

Both the consultation submissions and the interviews identified a wide range of policy recommendations to address health inequalities and, while the Marmot Review report did not include all of these, it did make multiple recommendations (to some extent allowing it to reflect the diverse views of this diverse group of actors). The lack of clarity around a small number of specific policy goals was repeatedly reflected on by interviewees across sectors as a factor that both reflected, and underpinned, the lack of a sense of cohesivity and helped explain the perceived lack of impact of the Marmot Review:

> Academic (Case Study 2): *"I mean there was […] nothing new in [the Marmot Review] from an academic's point of view. I mean it was a report of the bleeding obvious and the report of the vague, actually, a lot of the time […] It obviously has a very positive impact for him, but we're not clear about other things."*

> Civil servant (Case Study 2): *"There's an awful lot of, understandably, and I share them, concepts such as 'social justice', 'well, we've got to do it.' But governments make decisions*

*on what to do and how much to spend in different areas, and they need that information to help them make those decisions. And I think what the Marmot Review hasn't done is to really […], it didn't give me and my team the ammunition to go and argue with bits of government. […] [It] didn't say let's go to the Treasury and go and get another billion quid for health inequalities, you can't use the Marmot Review for that, and that's the sort of thing that I was hoping we could use some of it for…"*

Some interviewees suggested that the lack of specificity of the Marmot Review recommendations may have been a strategic reflection of the political context (which included an upcoming general election). In other words, the vague nature of the review might have been due to an attempt to prevent the Review recommendations being disregarded should the government change (as, indeed, it did):

> Academic (Case Study 2): *"The Marmot review then obviously did come up with some sort of policy principles to underpin things going forward, but they've obviously - perhaps deliberately, perhaps not - were made in a way that were sufficiently vague that they could be interpreted in different ways and obviously there has already been the lifestyle drift. So with the current government you do see much, maybe a continuation, but perhaps the intensification of that continuation of looking at lifestyle issues and sort of blaming people for their health problems, because they smoke or drink or indeed, in fact, I think because they're poor…"*

Some interviewees suggested this decision had proven wise, noting that the Conservative-Liberal Democrat Coalition Government, which came to power less than three months after the Marmot Review was published, had cited the review in a new Public Health White paper (Department of Health 2010). The problem with this approach, as the above interviewee reflected, was that it left the Review recommendations vulnerable to being used in ways that those involved did not support (particularly in terms of more individualised, behaviouralist policy approaches).

*Credibility and consensus across science-advocacy/policy interfaces*

The contrast in the perceived clarity of policy goals across the two cases studies was mirrored by contrasting perceptions about the extent to which a credible scientific consensus existing for each policy issue. In case study 1, our analysis shows that evidence and the engagement of researchers and health professionals in public health policymaking were highly valued and interviewees consistently suggested that a *"strong scientific consensus"* had played an important role in enabling

the health-focused policy subgroup to undertake the necessary advocacy work to achieve the desired policy outcome. Network members in the health subgroup described using evidence from European member states that had adopted comprehensive national smoking policies (e.g. Generáció 2020 Egyesület 2007, Portuguese Confederation on Smoking Prevention 2007, Royal College of Nursing 2007) to strengthen claims about the likely impacts of smoke free policy, to highlight the ineffectiveness of policies with exemptions, to calm fears about negative economic impacts, and to expose tobacco industry efforts to undermine smoke free policies. Moreover, several interviewees identified researchers and health professionals as helpful in advocacy terms due to their high credibility – for example:

> Public health advocate (Case Study 1): "*Physicians are very good in lobbying because if a physician comes to a politician – oh! – they really listen"*.

Exploiting the relatively higher kudos of these actors, public health advocates reported to strategically bringing researchers and health professionals on the scene to add weight to public health arguments, with a particular appreciation among advocates for pragmatic researchers who were "*willing to come out, roll their sleeves up, [and] do things more rough and ready".* Overall, both the network analysis and the interview data suggest that, in Case Study 1, researchers and health professionals closely collaborated with other network members to develop a coherent, well supported policy recommendation. In fact, the social network analysis identified the core group within the network as being made up of both scientific institutions and advocacy organisations, underlining the close interactions between these two types of actors.

The close relationship between advocacy and research was also evidenced by a considerable number of stakeholders who wore "*double hats"* (representative of the European Commission), i.e. consolidated two roles in one person. For example, one interviewee reflected that "*renowned academics…chair organisations which can be perceived as lobby organisations"* (representative of the European Commission) and that advocates were strongly involved in research. As a result of such close collaboration, the interview data suggest that researchers, health professionals and advocates all viewed each other as co-players in the fight for a smoke-free Europe.

In case study 2, the relationship between research, policy and advocacy seemed less comfortable for at least two reasons. First, interviewees (particularly those charged with developing policy responses to health inequalities) perceived a lack of scientific consensus in the available research:

> Civil servant: *"Far be it for me to criticise Sir Michael Marmot, have to be careful here […] but there is this assumption because the wider determinants of health are all correlated and*

*associated with inequality, and no-one disputes that, there's a real issue about what is the causation, and there's a lot of academic debate about that..."*

The second key factor preventing a strong research-advocacy interface in Case Study 2 seemed to be the perceived absence of any lead advocacy organisations (as discussed earlier). In the absence of this, some academics described having undertaken a more advocacy type role themselves, or highlightd others who had done so. However, the wearing of 'two hats' (to use an analogy employed in case study 1) seemed rather more contested in Case Study 2. While individuals undertaking dual roles were sometimes described effusively (as individuals taking leadership in a difficult setting, to be emulated by others), they were also regularly positioned as struggling to maintain their academic credibility (or simply no longer having the time to do much 'scientific' research). Marmot himself was a classic example of the divergent views within the network, with several interviewees describing him as a 'think tank' or 'advocate' (and no longer an independent scientist). While some interviewees welcomed this shift, arguing that Marmot's scientific 'authority' and 'integrity' was 'unassailable', making him ideally placed to undertake this kind of policy/advocacy leadership, others claimed his policy links were tarnishing his scientific reputation and, therefore, perceptions of the academic work underpinning particular recommendations. All of this suggests not only that there were important gaps in the advocacy function of the policy network surrounding health inequalities in England but that the small number of individuals trying to address this (mostly, it seemed, academics) faced multiple difficulties in combining types of work.

*The importance of political context for policy network success*

In both cases, interviewees were clear that political context had been a crucial factor in explaining the policy impact of public health researchers and advcoacy (or, in Case Study 2, their limited impact). In case study 1, several interviewees reported that strong political will,enthusiasm and commitment among key decision makers was crucial in driving the policy initiative forward. Public health advocates, for example, recalled that the European Commission had clearly wanted to develop recommendations for member states to protect citizens from second-hand smoke and that, rather than pushing for the issue to move up on the political agenda, advocates simply had to *"weigh in support"* (public health advocate, case study 1) and back the proposal with scientific evidence and public health arguments.

Reflecting on the reasons underlying this strong political support, interviewees referred to political developments in other legislatures (e.g. in some European member states such as the UK and

Ireland), with several interviewees referring to a subsequent *"domino effect"*. The FCTC and its guidelines on comprehensive smoke-free policy were also uniformly identified as providing a *"favourable climate"* (representative of the European Commission), resulting in an *"incredible momentum"* (public health advocate) towards smoke-free policies as well as providing a *"blueprint"* for change. Public health advocates explained that such developments had encouraged policymakers to not lag behind on-going policy developments, with one advocate recalling that *"everybody in Europe [was] talking about it and we certainly [didn't] want to be the last kid in the classroom to catch on"* (public health advocate, case study 1).

Some interviewees hypothesised that the political developments had been part of broader *"societal and political change"* (private sector representative, case study 1) and a long-term process which had started several decades earlier and which was now enabling a raft of tobacco control policies to emerge:

> Public health advocate (Case Study 1): *"Nothing had been happening for years and years. All the world had thought of tobacco control people as health hygienists […] and trying to take away the smoke pleasures of poor people. And all of a sudden it was a legitimate and very important health issue..."*

In other words, while the public health subgroup (or policy network, from the perspective of the ACF) was perceived to have operated effectively in Case Study 1, including by employing evidence effectively, a favourable polticial and social context was perceived to be a major explanatory factor for the success of the network in achieving its ambition. In contrast, in case study 2, interviewees consistently described the political context in unfavourable terms, whether they were discussing specific pieces of legislation associated with the Coalition Government (2010-2015) or whether they were discussing much longer term trends:

> Academic: *"if you look at the wider context […] what they're trying to do with the public health bill [which cited the Marmot Review] will be undermined by the welfare reform bill for certain groups of the population."*

> Academic: *"What happened after the Second World War in terms of social democratic agenda for welfare provision, which was something the whole community bought into. And we've lost now, we've become atomised, individualised, consumerist and we've lost that collective thinking..."*

Indeed, to the extent that the network of actors involved Case Study 2 could be described as having achieved any success, it was in helping to increase broad policy interest in, and understanding of, health inequalities and the social determinants of health, rather than in any specific policy change:

> Civil servant: *"I think it was fantastic in that it raised inequality up the public policy agenda at exactly the right time, as we were coming into an election cycle, and that was absolutely fantastic."*

> Public sector policy advisor: *"I think the Marmot Review established at least the beginnings of a vocabulary to talk about the importance of the social determinants, although, as I've said, I think there's still a long way to go. […] I do think nevertheless the notion of social determinants has entered the vocabulary in a way that wasn't there in '97."*

These quotations are a salient reminder that the extent of change being sought by those seeking to reduce health inequalities is, in many ways, far greater than that which is being sought by tobacco control advocates. Interview extracts from both case studies also draw attention to the extent to which political and social contexts can change over time, opening up new possibilities for some policy issues will reducing the chances of success for others.

**Concluding discussion**

To date, much of the research concerning the relationship between evidence and policy commonly depicts 'politics' as little more than a barrier to achieving evidence-based policy (see Pawson 2006). Our study instead tries to explore how evidence and politics interact, via the complex actor constellations that so often characterise policy processes. Specifically, using two empirical public health case studies, we demonstrate how the theories of policy change involving 'policy networks' and advocacy can significantly strengthen analyses of the use of evidence in policymaking. Previous studies of tobacco control and health inequalities debates have already demonstrated that research is only one of multiple factors that influence the development of public health policy (Warner and Mendez 2010, Smith 2013) but our analysis suggests that the ways in which actors organise themselves to employ (and deploy) this evidence in policy debates is crucial to understanding its impact. Case Study 1 illustrates the ways in which researchers, health professionals, advocates and policymakers can actively collaborate in the development of public health policy, with public health advocates drawing on scientific evidence to strengthen their arguments; researchers working with advocates to better understand the strategic policy context and provide the kinds of research

required to advance policy goals; and policymakers seeking contact with researchers and advocates to develop policies which are backed by available evidence. These actions contributed to a situation in which the underpinning evidence was broadly perceived as uncontested (despite the efforts of an industry-focused sub-group) and there was also a working consensus around the preferred policy outcome (despite an earlier disagreement). Indeed, the policy network had been so successful that some policy actors were themselves engaging in advocacy efforts to achieve policy change. In contrast, Case Study 2 demonstrates the difficulties of employing evidence in policy contexts for which advocates and advocacy coalitions are lacking. In the context of a lack of leadership and an unfavourable political climate, it is clear that no organised network emerged and levels of trust between some of those involved in trying to effect policy change was low. This was reflected in the contestations around research evidence, which seemed to dissuade civil servants from recommending ministers make any substantial changes. It also meant there were no clear pathways via which research-informed policy responses could travel from research to policy.

We acknowledge that using a different analytical approach for delineating the visual networks in the two cases (which was a necessary decision, reflecting the varying nature of the data) may have informed some of the identified differences. However, our data triangulation with interviews allows us to be fairly confident in the nature of the differences between the case studies.

Our analysis suggests that models of the relationship between evidence and policy that focus primarily on researchers and policymakers, or evidence and policy, may be failing to capture the crucial, translation and facilitation role of advocates. Instead, building on a recent systematic review of studies of evidence use in public health by Masood et al (2018), we suggest that theories of policy change which focus on policy networks may provide more productive analytical frameworks for examining the translation and use of evidence in policy. In methodological terms, our paper builds on a social network analysis study of a Department of Health's evidence use by Yousefi-Nooraei et al (2012) in underlining the potential utility of social network analysis in supplementing more traditional methods (e.g. interviews and documentary analysis) for understanding how and why some public health evidence informs policy change, while other evidence does not. However, while several of the most popular 'policy networks' theories, notably the 'advocacy coalition framework' (Sabatier and Jenkins-Smith 1993) and 'epistemic communities' (Haas, 1992), place a strong emphasis on the value-basis of networks/coalitions, neither of our case studies suggested values were key to understanding the network's formation or success. Rather, our findings identify six key features that were evident in Case Study 1 but not 2, which might help explain their varying success in achieving policy change:

(i) Network members regularly engaged with different types of colleagues and appreciated the range of skills and expertise of that this diversity provided (this was regularly commented on by interviewees involved in Case Study 1, whereas interviewees in Case Study 2 had little sense of who, beyond academics and policymakers, were even engaging in health inequalities debates);

(ii) Network members regularly met and communicated with one another, leading to high levels of intra-network trust;

(iii) Network members focused on developing clearly defined, research-informed policy proposals and, where disagreement arose, collectively engaged in strategic policy trade-offs, allowing the network to coalesce around the policy proposal with greatest network support;

(iv) Clear organisational leadership was provided by some advocacy groups, who were operating outside research and policy and who were therefore well-placed to function as knowledge brokers who helped researchers and policymakers to understand one another;

(v) Network members perceived, and outwardly communicated, a high degree of scientific consensus;

(vi) Network members perceived, and outwardly communicated, a supportive wider social and political context .

We suggest that, taken together, the above features are all at least as important as actors' core values in explaining the formation, behaviour and success of policy networks in achieving policy change. Further research is needed to assess the relevance of our findings beyond these two case studies, even within public health, but we cautiously suggest that policy networks with the above features offer promising routes for evidence and evidence-informed ideas to travel into policy, whereas researchers and advocates working in policy areas that lack such networks may struggle to effect change. In practical terms, for those seeking to improve the use of evidence in policy, the findings provide some useful insights where a functioning policy network already exists, as to how the network's policy influence might be enhanced. It is less obvious how these findings might be employed if for issue on which coherent policy networks are absent (as was the case for health inequalities in the UK). In these cases, it certainly seems worth considering whether such a network might be established. However, this likely requires at least one well-resourced, suitably credible advocacy organisation to be willing to take on a leadership role and this, in turn, is likely to depend on perceptions of a favourable political context (since advocacy organisations are unlikely to be willing to invest significant resources in issues for which they view policy change as improbable). So,

although successful policy networks might be able to shape political contexts over time, they are also less likely to emerge in very hostile climates.

Moreover, achieving any one of these factors seems unlikely to be sufficient for increasing the chances of evidence informing policy change. To take one example from the broader literature, Pearce's (2014) examination of climate change debates demonstrates that scientific consensus alone provides insufficient evidence for policy in the absence of compelling ideas and arguments. In these cases, we cautiously propose the best approach may be to start by: (i) connecting discussions about the policy problem to pragmatic conversations about potential policy responses; (ii) diversifying the types of actors involved in this conversation beyond academia and the civil service; (iii) being explicit about the need to engage in strategic policy trade-offs; and (iv) garnering support for smaller-scale proposals by linking their development to a longer-term vision of more ambitious policy change.

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**References**

Bauld, L, Day, P and Judge, K, 2008, Off Target: A Critical Review of Setting Goals for Reducing Health Inequalities in the United Kingdom, *International Journal of Health Services*, 38,3, 439-54

Borgatti, S P, Everett, M and Freeman, L, 2002, *Ucinet for Windows: Software for Social Network Analysis*. Harvard, MA, Analytic TechnologiesBorzel, T, 1998, Organizing Babylon - On the Different Conceptions of Policy Networks. *Public Administration*, 76(2), 253-273.

Conference of the Parties (CoP), 2007, *Guidelines for implementation of Article 8 of the WHO FCTC (decision FCTC/COP2(7))*, WHO FCTC CoP URL: http://www.who.int/entity/fctc/cop/art%208%20guidelines_english.pdf?ua=1

Council of the European Union, 2009, Council Recommendation of 30 November 2009 on smoke-free environments (2009/C 296/02), *Official Journal of the European Union*, C 296/4

Department of Health,1999, *Reducing Health Inequalities: An Action Report*. London, The Stationary Office

Department of Health, 2002, *Tackling health inequalities – Summary of the 2002 cross-cutting review*. London, Department of Health

Department of Health, 2005, *Tackling Health Inequalities: Status Report of the Programme for Action*. London, Department of Health

Department of Health, 2010, *Healthy lives, healthy people: our strategy for public health in England (White Paper)*. London, Department of Health

Gaskell, G, 2000, Individual and Group Interviewing. In: M. W. Bauer and G. Gaskell (eds). *Qualitative Researching with text, image and sound. A practical handbook*. London, Sage, 38-56

Generáció 2020 Egyesület, 2007, "Opinion on the Green Paper of the Commission." Retrieved 31 July, 2012, from http://ec.europa.eu/health/archive/ph_determinants/life_style/tobacco/documents/r-074_en.pdf

Haas, P, 1992, Introduction: Epistemic Communities and International Policy Coordination, *International Organization*, 46,1, 1-35

Haynes, L, Service, O, Goldacre, B and Torgerson, D, 2012, *Test, Learn, Adapt: Developing Public Policy with Randomised Controlled Trials*. London, Cabinet Office Behavioural Insights Team

Henderson, M, 2012, *The Geek Manifesto: Why Science Matters*. London, Bantam Press

Latapy, M, Magnien, C and Vecchio, N, 2008, Basic notions for the analysis of large two-mode networks, *Social Networks,* 30(1):31-48Laumann, E, Marsden, P and Prensky, D, 1992, The boundary specification problem in network analysis, in Freeman, L, White, D and Romney, A, (eds) *Research Methods in Social Network Analysis*. New Bruntswick: George Mason University Press: p. 61-79

Lynch, J, 2017, Reframing inequality? The health inequalities turn as a dangerous frame shift, *Journal of Public Health*, 39, 4, 653–660

Mulgan, G, 2005, Government, Knowledge and the Business of Policy Making: The Potential and Limits of Evidence-Based Policy, *Evidence & Policy*, 1,2, 215–26

Marmot, M, 2010, *Fair society, healthy lives* Retrieved 10 April, 2017, from http://www.instituteofhealthequity.org/projects/fair-society-healthy-lives-the-marmot-review.

Marsh, Dand Rhodes, R, 1992, *Policy Networks in British Government*, Oxford, Oxford University Press

Marsh, D and Smith, M, 2000, Understanding policy networks: towards a dialectical approach, *Political Studies*, 48,1, 4-21.=

Masood, S, Kothari, A and Regan, S, 2018, The use of research in public health policy: a systematic review, *Evidence & Policy* advance online access: http://www.ingentaconnect.com/content/tpp/ep/pre-prints/content-ppevidpol1700011r2#
Pawson, R, 2006, *Evidence-based Policy: A Realist Perspective*. London, SAGE Publications.

Pearce, W, 2014, Scientific data and its limits: Rethinking the use of evidence in local climate change policy, *Evidence & Policy*, 10, 187–203.

Portuguese Confederation on Smoking Prevention, 2007, *Response to Green Paper. Towards a Europe free from tobacco smoke: policy options at EU level*. Retrieved 31 July, 2012, from http://ec.europa.eu/health/archive/ph_determinants/life_style/tobacco/documents/r-078_en.pdf.

QSR International, 2007, *QSR NVivo Version 7.0.281.0.SP4*. Southport, QSR International

Republic of Ireland (2002) *Public Health (Tobacco) Act 2002 (Commencement) Order 2004, Statutory Instrument No. 110/2004*. Republic of Ireland. Dublin

Royal College of Nursing, 2007, *RCN Response to the European Commission's Green Paper: 'Towards a Europe free from tobacco smoke: policy options at EU level'*. Retrieved 11 June, 2012, from http://ec.europa.eu/health/archive/ph_determinants/life_style/tobacco/documents/r-112_en.pdf

Sabatier, P and Jenkins-Smith, H, 1993a, The Advocacy Coalition Framework: Assessment, Revisions, and Implications, in: P Sabatier and HJenkins-Smith (eds). *Policy Change and Learning*. Boulder, San Francisco, Oxford, Westview Press,211-35

Sabatier, P and Jenkins-Smith, H, 1993b, *Policy Change and Learning: An Advocacy Coalition Approach*. Boulder, Westview Press

Smith, K, 2013, *Beyond Evidence Based Policy in Public Health: The Interplay of Ideas*. Basingstoke, Palgrave Macmillan

Smith, K, and Katikireddi, S, 2012, A glossary of theories for understanding policymaking, *Journal of Epidemiology and Community Health*, Online first: doi:10.1136/jech-2012-200990

Waarden, F, 1992, Dimensions and types of policy networks. *European Journal of Political Research*, 21(1-2), 29-52.

Warner, K and Mendez, D (2010) Tobacco control policy in developed countries: yesterday, today, and tomorrow, *Nicotine & Tobacco Research*, 12,9, 876-87.

Weishaar, H, Amos, A and Collin, J, 2015, Capturing complexity: mixing methods in the analysis of a European tobacco control policy network. *International Journal of Social Research Methodology*, 18, 2, 175-92.

World Health Organization, 2003, *WHO Framework Convention on Tobacco Control*. Geneva, World Health Organization

Yousefi-Nooraei, R, Dobbins, M, Brouwers, M, Wakefield, P, 2012, Information seeking for making evidence-informed decisions: A social network analysis on the staff of a public health department in Canada, *BMC Health Services Research,* 12, 118